

Training Your Own Technology Staff

Competition from the private sector and a shortage of experienced Information Technology (IT) technicians made it difficult for the Idaho Transportation Department (ITD) to fill vacant technical positions. To meet the need for IT staff, the ITD developed a computer training program for its employees interested in changing careers. The program offers employees expanded career growth, reduces turnover, and provides a pool of staff trained to meet the ITD's specific needs.

The Idaho Transportation Department (ITD) has sponsored three computer training programs in this home-grown approach to developing information technology (IT) staff. The program is a cooperative effort for the entire Department. Division heads identify the number of IT positions they would like added to their Information Services (IS) support team and that they can eliminate from their complement. Those vacant positions are then transferred to IS for reclassification to IT programmer. For example, if the Maintenance Division would like three additional IT positions added to its IS support team, the Division identifies three vacancies that it does not need and transfers those positions to IS. The number of IT positions available determines the number of participants selected for the program. The ITD invites all employees (including those in district offices) with a minimum of five years of experience with the agency to apply for the training. Once they are trained, employees are assigned to an IS support team, which may not be a team supporting the division from which they came.

Identifying Participants

ITD's model for the training includes advertising to promote the program and its benefits and information meetings to explain the program's intent and application process. Interested employees submit resumes and a statement of their interest in the program. Initially there are no education or job skill requirements, and the program attracts a broad range of employees, including mechanics, accounts payable clerks, technicians, and the occasional engineer. Candidates are often employees who work in lower level jobs or lack training beyond

The ITD Information Services Programmer Training Program:

- Provides a significant morale boost for Departmental employees.
- Provides a pool of staff trained in information technology tailored specifically to ITD needs and systems.
- Allows ITD to staff IT positions less expensively than with contract programmers.
- Gives employees the opportunity to change careers and expand career advancement options.
- Enhances employee commitment to stay with ITD.
- Reduces the potential for increased turnover related to job burnout.



The opportunity to learn what is essentially a new profession is a real morale booster throughout the Department, even for those who aren't selected to participate. They see the Department's commitment to improve employee job potential. They also see how program participants repay the Department in the kind of work they do and their commitment to doing a quality job.

high school, and they apply because they are looking for a way to advance.

The candidate selection process is conducted by IS with assistance from ITD's Human Resource Services Section. Successful applicants must pass two tests. The first is a general aptitude test designed for data processing. In the most recent class, 85 of 300 applicants passed the first test.

The second test is more difficult because it focuses more heavily on the kind of logic necessary for successful IT work. It is logic that more closely correlates to the IT business and gives a better insight into the IT 'way of thinking'. It is actually the same test that incoming Boise State University (BSU) IT students take for entry into the applied technology program.

Forty-one employees passed the second test and were invited for interviews. The committee was interested in both the technical aptitude and applicants' interpersonal skills. After evaluating interview and test scores, and verifying that all had

no disciplinary actions in their personnel files, ITD invited 15 employees to continue the program. If one of the employees selected had had disciplinary actions on file, another employee would have been selected.

Departmentwide Commitment to IT Training

Participants selected for the program undertake an intensive five-month training period—8 a.m. to 5 p.m., five days a week. Participants are allowed no vacation time (except for a one-week break over the Christmas holiday) and encouraged to use sick leave judiciously. A consultant—and former ITD employee familiar with the Department's culture—taught the most recent class. Future classes may use additional contract instructors to present specific technical areas such as Oracle or Microsoft applications. One participant referred to the five-month commitment as "scary, but the investment of time and energy was worth it.

I'm doing things at work that I never imagined I could do."

Greg Christensen, currently with IS Bureau Tech Services, used the training to meet a long-time career goal. According to Greg, "I started to work with the Department when I was in school. My plan was to work, get money, and finish my degree. I just never got around to the last part. But I'd taken evening computer operation classes and vo-tech classes in electronics—my goal was to get into IT tech support. The ITD program just made all my previous experience fit, and I'm doing exactly what I'd hoped to do. I just wish I'd discovered this sooner in my career, because this is what I love doing."

The Department makes an equally strong commitment to the training. For example, employees retain their current job titles and are paid at that rate during the program. The divisions or sections double-bill for the positions in that they pay the participant's salary during training and the salary of a replacement worker. The Department also guarantees a return to the job or a comparable job if an employee's training isn't successful. To date, that has not been an issue.

Participants also commit to an 18-month tenure with the Department following the training. Those who fail to meet that commitment are required to refund a portion of the training cost. To date, no employee has had to refund that cost.

Department IS personnel work closely with BSU to ensure the curriculum developed

to meet ITD needs also meets with BSU approval for awarding a certificate of completion. The instructor also must meet certification standards. When participants finished the program, they were awarded a certificate of completion from BSU's School of Vocational Technical Education.

Following the program, all participants are assigned to an Information Services team whose staff serve as mentors. This is the participants' opportunity to learn Department systems and processes. This first-hand experience builds on their classroom training and gives participants the opportunity to work in several IT areas including design applications, systems analysis, and programming and maintenance.

The Result

The Idaho Department of Transportation has enjoyed tremendous rewards for its investment—an investment that recognizes employees and their contributions to state government. According to Carol Barton, Development Manager in the Bureau of Information Services who coordinates the program, “The opportunity to learn what is essentially a new profession is a real morale booster throughout the Department, even for those who aren't selected to participate. They see the Department's commitment to improve employee job potential. They also see how program participants repay the Department in the kind of work they do and their commitment to doing a quality job.”

One Programmer Analyst's Story

After working as an office manager for several years, I was ready for a change. I saw announcements about the IT training program, but I didn't know too much about it. In fact, before my involvement in the program, I didn't even know what [computer] coding looked like. I attended a Department informational meeting about the program and decided to give it a try.

My score on the first test was pretty average, and I was amazed when I did well on the aptitude test and was selected for the program following the interviews. I was apprehensive about training eight hours a day, five days a week, especially since it was in a field that I knew nothing about. The course really took over my life for those five months, but it was worth it. The 15 of us shared the excitement and frustrations of the experience, which made it better. We were also fortunate to have had excellent instructors.

Since completing the program I've had additional opportunities to learn and assume responsibility. I've learned from my experience that taking a chance and making a career change is a good thing. I found a home in the IT field without knowing that I would enjoy it, much less be able to do the work. It's been a rewarding experience.

Sharon K. Bates
Programmer Analyst Senior

Carol Barton also notes that some program graduates have left ITD for other state government agencies and the private sector. She concludes, “I think that many of our graduates feel that the Department has invested in them and they remain loyal to the Department. And ITD has realized more than a reasonable return on its training investment.”

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